Engineering Interpretations

Construction Material and Excavating

Soils are rated as sources for road fill, topsoil, sand, and gravel. Suitability ratings of good, fair, or poor are given for soils used as a source of road fill and topsoil. Ratings of probable and improbable are given for sand and gravel. A rating of probable means that on the basis of the available evidence, the source material is likely to be in or below the soil. A rating of improbable means that the source material is unlikely to be in or below the soil. The ratings for sand and gravel do not consider the quality of the source material because quality depends on how the source material is to be used.

Road Fill

Road fill consists of soil material that is excavated from its original position and used in road embankments elsewhere. The evaluations for road fill are for low embankments that generally are less than 6 feet in height and are less exacting in design than high embankments such as those along superhighways. The rating is given for the whole soil, from the surface to a depth of about 5 feet, based on the assumption that soil horizons will be mixed in loading, dumping, and spreading. Soils are rated as to the amount of material available for excavation, the ease of excavation, and how well the material performs after it is in place.

Sand

Sand as a construction material is usually defined as particles ranging in size from 0.074 mm (sieve #200) to 4.75 mm (sieve #4) in diameter. Sand is used in great quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the sand for specific purposes is not evaluated. If the lowest layer of the soil contains sand, the soil is rated as a probable source regardless of thickness. The assumption is that the sand layer below the depth of observation exceeds the minimum thickness.

Gravel

Gravel as a construction material is defined as particles ranging in size from 4.76 mm (sieve #4) to 76 mm (3 inches) in diameter.

Gravel is used in great quantities in many kinds of construction. Specifications for each purpose vary widely. The intent of this rating is to show only the probability of finding material in suitable quantity. The suitability of the gravel for specific purposes is not evaluated. If the lowest layer of the soil contains gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the gravel layer below the depth of observation exceeds the minimum thickness.

Topsoil

The term "topsoil" has several meanings. As used here, the term describes soil material used to cover an area so as to improve soil conditions for establishment and maintenance of adapted vegetation. Generally, the upper part of the soil, which is richest in organic matter, is most desirable; however, material excavated from deeper layers is also used. In this rating, the upper 40 inches of soil material is evaluated for use as topsoil. In the

borrow area, the material below 40 inches is evaluated for its suitability for plant growth after the upper 40 inches is removed. The soil properties that are used to rate the soil as topsoil are those that affect plant growth, the ease of excavation, loading, and spreading, and those that affect the reclamation of the borrow area.

This subsection includes:

• (a) Construction Materials and Excavating

Map symbol and soil name	 Source for roadfi 	.11	 Source for sand 		 Source for grave	1	Source for topsoi	Source for topsoil		 Shallow excavations 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
1C: Brandon	 Not limited 		 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00	Limited -excess fines (thickest layer) -excess fines (bottom layer)	 1.00 0.99 	 Very limited ~area reclaim (very limited) ~too acid (slightly limited) ~too clayey (slightly limited)	1.00	 Very limited ~cutbanks cave (very limited)	1.00	
1D: Brandon	 Not limited 		 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00 	 Limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 0.99 	 Very limited ~area reclaim (very limited) ~slope (limited) ~too acid (slightly limited)	 1.00 0.63 0.30	 Very limited ~cutbanks cave (very limited) ~slope (limited)	1.00	
3B: Loring	 Slightly limited ~wetness (slightly limited)	0.12	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	Slightly limited ~too clayey (slightly limited) ~wetness (slightly limited)	0.21	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	 1.00 0.29	
3C2: Loring, ERODED-	 Slightly limited ~wetness (slightly limited) 	0.12	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	 1.00 1.00	 Slightly limited ~too clayey (slightly limited) ~wetness (slightly limited)	0.21	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	 1.00 0.29	

Map symbol and soil name	Source for roadf:	111	 Source for sand 	l	 Source for grave	el	 Source for topsoi 	11	 Shallow excavation 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3C3: Loring, SEVERELY ERODED	 	 	 Very limited 		 Very limited 		 Slightly limited 		 Very limited 	
	~wetness (slightly limited)	0.12	<pre>~excess fines (thickest layer) ~excess fines (bottom layer)</pre>	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	<pre> -too clayey (slightly limited) -wetness (slightly limited)</pre>	0.21	-wetness (very limited) -cutbanks cave (slightly limited)	1.00
3D2: Loring, ERODED-	Slightly limited ~wetness (slightly limited)	0.12	Very limited -excess fines (thickest layer) -excess fines (bottom layer)	 1.00 1.00 	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	Limited ~slope (limited) ~too clayey (slightly limited) ~wetness (slightly limited)	0.63	 Very limited ~wetness (very limited) ~slope (limited) ~cutbanks cave (slightly limited)	 1.00 0.63 0.29
3D3: Loring, SEVERELY ERODED	 Slightly limited		 Very limited 		 Very limited		Limited		 Very limited	
2.002	~wetness (slightly limited) 	0.12	<pre>~excess fines (thickest layer) ~excess fines (bottom layer)</pre>	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	~slope (limited) ~too clayey (slightly limited) ~wetness (slightly limited)	0.63	(very limited)	1.00 0.63 0.29
5C2: Memphis, ERODED	 Not limited 		 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Slightly limited ~too clayey (slightly limited) ~too acid (slightly limited)	0.29	 Slightly limited ~cutbanks cave (slightly limited)	0.29

Map symbol and soil name	Source for roadf:	i11	 Source for sand 	i	 Source for grave 	el	 Source for topsoi 	.1	 Shallow excavati 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
5C3: Memphis, SEVERELY ERODED	 Not limited		 Very limited		 Very limited		 Slightly limited		 Slightly limited	
			-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	<pre> -too clayey (slightly limited) -too acid (slightly limited)</pre>	0.29	-cutbanks cave (slightly limited) 	0.29
5D3: Memphis, SEVERELY ERODED	 Not limited 		 Very limited		 Very limited 		 Limited 		 Limited 	
EKUDED			-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	-slope (limited) -too clayey (slightly limited) -too acid (slightly limited)	0.63	-slope (limited) -cutbanks cave (slightly limited)	0.63
5F: Memphis	 Limited ~slope (limited)	0.67	Very limited -excess fines (thickest layer) -excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~slope (very limited) ~too clayey (slightly limited) ~too acid (slightly limited)	1.00	 Very limited ~slope (very limited) ~cutbanks cave (slightly limited)	1.00
6F: Eustis	 Limited ~slope (limited) 	0.67	Possible source ~possible source (thickest layer) ~possible source (bottom layer)	0.06	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~too sandy (very limited) ~slope (very limited) ~too acid (slightly limited)	1.00	(very limited)	1.00

Map symbol and soil name	Source for roadfi	11	 Source for sand 	1	Source for grave	el	Source for topsoi	.1	Shallow excavation	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6F (cont.) Memphis	 Very limited ~slope (very limited)	 1.00 	Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~slope (very limited) ~too clayey (slightly limited) ~too acid (slightly limited)	1.00	 Very limited ~slope (very limited) ~cutbanks cave (slightly limited)	1.00
13B: Askew	 Limited ~wetness (limited) ~shrink-swell (slightly limited)	 0.86 0.22 	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	Limited ~wetness (limited) ~too clayey (slightly limited) ~too acid (slightly limited)	0.86	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	1.00
15D: Goss	 Moderately limited ~shrink-swell (moderately limited) ~large stones (slightly limited)	 0.41 0.21 0.21	Very limited -excess fines (thickest layer) -excess fines (bottom layer) -small stones (thickest layer)	 1.00 1.00 0.22	Very limited ~excess fines (thickest layer) ~excess fines (bottom layer) ~small stones (thickest layer)	1.00	 Very limited ~small stones (very limited) ~too clayey (very limited) ~area reclaim (limited)	 1.00 1.00 0.98	 Very limited ~cutbanks cave (very limited) ~slope (limited) ~too clayey (moderately limited)	 1.00 0.63 0.53
15F: Goss	 Very limited ~slope (very limited) ~shrink-swell (moderately limited) ~large stones (slightly limited)	 1.00 0.41 0.21	Very limited -excess fines (thickest layer) -excess fines (bottom layer) -small stones (thickest layer)	1.00	Very limited	1.00	Very limited ~small stones (very limited) ~slope (very limited) ~too clayey (very limited)	1.00	 Very limited ~cutbanks cave (very limited) ~slope (very limited) ~too clayey (moderately limited)	1.00

Map symbol and soil name	Source for roadf:	i11	Source for sand	İ	Source for grave	el	Source for topsoi	.1	Shallow excavati	.ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
16C2: Shadygrove, ERODED	 Very limited		 Very limited		 Very limited		Limited		Limited	
	<pre> ~shrink-swell (very limited) </pre>	1.00	<pre>~excess fines (thickest layer) ~excess fines (bottom layer)</pre>	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	<pre> -too clayey (limited) -too acid (slightly limited) -large stones (slightly limited)</pre>	0.88	<pre> ~wetness (limited) ~cutbanks cave (slightly limited) ~too clayey (slightly limited)</pre>	0.95 0.29 0.21
39: Pits	 Not rated 		 Not rated 		 Not rated 		Not rated		 Not rated 	
45: Canalou, RARELY FLOODED	 Slightly limited -wetness (slightly limited)	0.12	Possible source -possible source (thickest layer)	0.45	 Very limited ~excess fines (bottom layer)	1.00	 Very limited ~too sandy (very limited)	1.00	 Very limited ~cutbanks cave (very limited)	1.00
51: Allemands,	 Very limited		~possible source (bottom layer) Not Rated	0.45	~excess fines (thickest layer) Not Rated	1.00	~wetness (slightly limited) Not Rated	0.12	<pre> ~wetness (very limited) Very limited</pre>	1.00
RARELY FLOODED	-shrink-swell (very limited) -wetness (very limited)	1.00	 Not Rated ~excess fines (bottom layer)	1.00	 Not Rated ~excess fines (bottom layer)	1.00	 Not Rated Not Rated ~wetness (very limited)	1.00	 ~ponded (wetness) (very limited) ~too clayey (very limited) ~wetness (very limited)	1.00

Map symbol and soil name	Source for roadfi	11	Source for sand	l	Source for grave	el	Source for topsoi	1	Shallow excavatio	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52: Kobel, OCCASIONALLY FLOODED	 Very limited	 	 Very limited		 Very limited		 Very limited	 	 Very limited	
	<pre> ~shrink-swell (very limited) ~wetness (very limited)</pre>	1.00	<pre>~excess fines (thickest layer) ~excess fines (bottom layer)</pre>	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	~wetness (very limited) ~too clayey (very limited)	1.00 1.00 	<pre> -wetness (very limited) -flooding (moderately limited) -too clayey (moderately limited)</pre>	0.45
55: Amagon, RARELY FLOODED	 Limited 	 	 Very limited		 Very limited		 Limited	 	 Very limited	
	<pre> ~wetness (limited) ~shrink-swell (moderately limited) </pre>	0.86 0.45 	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	~wetness (limited) ~too clayey (slightly limited) ~too acid (slightly limited)	0.86 0.29 0.12	~wetness (very limited) ~cutbanks cave (slightly limited) 	1.00
57B2: Bosket, ERODED-	 Not limited 	 	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Moderately limited ~too sandy (moderately limited) 	 0.56 	Slightly limited ~cutbanks cave (slightly limited)	0.29
57C3: Bosket, SEVERELY ERODED	 Not limited	 	 Very limited 		 Very limited 		 Moderately limited		 Slightly limited 	
	 	 	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines thickest layer)	1.00	-too sandy (moderately limited)	0.56 	-cutbanks cave (slightly limited)	0.29

Map symbol and soil name	Source for roadf	ill	 Source for sand 	i	Source for grave	el	Source for topsoi 	1	Shallow excavati	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57D3: Bosket, SEVERELY ERODED	 Not limited		 Very limited 		 Very limited	 	 - Limited -	 	 - Limited -	
EKODED			-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	 -slope (limited) -too sandy (moderately limited)	 0.56	 -slope (limited) -cutbanks cave (slightly limited)	0.63
59B: Broseley	 Not limited 		Possible source ~possible source (thickest layer) ~possible source (bottom layer)	0.38	Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~too sandy (very limited) 	 1.00 	 Very limited ~cutbanks cave (very limited) 	11.00
61: Calhoun	 Very limited ~wetness (very limited) ~shrink-swell (slightly limited)	1.00	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	(bottom layer)	1.00	 Very limited ~wetness (very limited) ~too acid (slightly limited)	 1.00 0.30	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	 1.00 0.29
63: Commerce, RARELY FLOODED	Slightly limited 	0.12	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited -excess fines (bottom layer) -excess fines (thickest layer)	1.00	 Slightly limited -too clayey (slightly limited) -wetness (slightly limited)	 0.21 0.12 	 Very limited -wetness (very limited) -cutbanks cave (slightly limited) -too clayey (slightly limited)	 1.00 0.29 0.21

Map symbol and soil name	Source for roadfi	11	 Source for sand 	l	 Source for grave 	el	 Source for topsoi 	1	 Shallow excavatio 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64: Convent, RARELY FLOODED	 Slightly limited ~wetness (slightly limited)	 0.12	Very limited	1.00	Very limited	1.00	 Slightly limited ~wetness (slightly limited)	0.12	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	11.00
65: Crowley	 Very limited ~shrink-swell (very limited) ~wetness (very limited)	 1.00 1.00	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 very limited ~too clayey (very limited) ~wetness (very limited)	 1.00 1.00 	 Very limited ~wetness (very limited) ~too clayey (moderately limited) ~cutbanks cave (slightly limited)	 1.00 0.38 0.29
67: Dundee	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited)	 0.45 0.11 	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Moderately limited ~too clayey (moderately limited) ~too acid (slightly limited) ~wetness (slightly limited)	 0.33 0.12 0.11	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	1.00
68: Waverly, OCCASIONALLY FLOODED	 Very limited ~wetness (very limited)	 1.00 	Very limited excess fines (thickest layer)excess fines (bottom layer)	1.00	Very limited -excess fines (bottom layer) -excess fines (thickest layer)	1.00	 -wetness (very limited)	 1.00 	Very limited	 1.00 0.60 0.29

Map symbol and soil name	Source for roadfi	11	Source for sand	L	Source for grave	el	Source for topsoi	1	Shallow excavatio	ns
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69: Falaya, OCCASIONALLY FLOODED	 		Very limited		 Very limited		Limited		 Very limited	
	<pre>~wetness (limited)</pre>	0.86 	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	~wetness (limited) ~too acid (slightly limited)	0.86	~wetness (very limited) ~flooding (moderately limited) ~cutbanks cave (slightly limited)	1.00 0.60 0.29
71: Gideon, OCCASIONALLY FLOODED	 Very limited		 Very limited		 Very limited 		 Very limited 		 Very limited 	
F ECODED	<pre>~wetness (very limited) ~shrink-swell (moderately limited)</pre>	1.00 0.45	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	 -wetness (very limited) -too clayey (slightly limited)	1.00 0.29 	 -wetness (very limited) ~flooding (moderately limited) ~cutbanks cave (slightly limited)	1.00 0.60 0.29
73: Lilbourn, RARELY FLOODED	 Very limited		 Very limited		 Very limited		 Very limited		 Very limited	
RAKEHI FHOODED	~wetness (very limited)	1.00 	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	~wetness (very limited) ~too sandy (slightly limited)	1.00	~wetness (very limited) ~cutbanks cave (very limited)	1.00
74B: Malden	 Not limited 	 	Possible source ~possible source (thickest layer) ~possible source (bottom layer)	 0.06 0.05	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	 Very limited ~too sandy (very limited) ~area reclaim (moderately limited)	 1.00 0.50	 Very limited ~cutbanks cave (very limited)	1.00

Map symbol and soil name	Source for roadfi	11	 Source for sand 	l	 Source for grave	el	Source for topsoi	1	 Shallow excavatio 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75B: Malden	 Not limited 		 Possible source ~possible source (thickest layer) ~possible source (bottom layer)	0.36	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~too sandy (very limited) 	1.00	 Very limited ~cutbanks cave (very limited)	1.00
76: Mhoon, OCCASIONALLY FLOODED	 Limited		 Very limited 		 Very limited		 Limited	 	 Very limited	
F TOODED	<pre>~wetness (limited) ~shrink-swell (moderately limited)</pre>	0.86	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	 -wetness (limited) -too clayey (moderately limited)	 0.86 0.33 	 -wetness (very limited) ~flooding (moderately limited) ~cutbanks cave (slightly limited)	1.00 0.60 0.29
77: Roellen, OCCASIONALLY	 Very limited 	 	 Very limited 		 Very limited		 Very limited	 	 Very limited	
FLOODED	~wetness (very limited) ~shrink-swell (very limited)	 1.00 1.00 	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	 ~too clayey (very limited) ~wetness (very limited) 	 1.00 1.00 	<pre> ~wetness (very limited) ~flooding (moderately limited) ~too clayey (moderately limited)</pre>	0.60
80: Sharkey, OCCASIONALLY	 Very limited		 Very limited		 Very limited		 Very limited	 	 Very limited	
FLOODED	-shrink-swell (very limited) -wetness (very limited)	 1.00 1.00	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00 1.00 	 ~too clayey (very limited) ~wetness (very limited) 	 1.00 1.00 	 ~wetness (very limited) ~too clayey (very limited) ~flooding (moderately limited)	1.00 1.00 0.60

Map symbol and soil name	Source for roadfi	11	 Source for sand 	l	 Source for grave 	el	 Source for topsoi 	1	 Shallow excavatio 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81: Sharkey, OCCASIONALLY FLOODED	 Very limited		 Very limited		 Very limited		 Very limited		 Very limited	
	~shrink-swell (very limited) ~wetness (very limited)	1.00	<pre>~excess fines (thickest layer) ~excess fines (bottom layer) </pre>	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	~too clayey (very limited) ~wetness (very limited)	1.00	~wetness (very limited) ~too clayey (very limited) ~flooding (moderately limited)	1.00 1.00 0.60
83: Sikeston, OCCASIONALLY FLOODED	 Very limited		 Very limited		 Very limited 		 Very limited		 Very limited	
FLOODED	~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 0.37	~excess fines (thickest layer) ~excess fines (bottom layer)	1.00	~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	-wetness (very limited) -too clayey (slightly limited)	1.00	-wetness (very limited) ~flooding (moderately limited) ~cutbanks cave (slightly limited)	1.00 0.60 0.29
85: Wardell, RARELY	 Very limited	 	Possible source		 Very limited		 Very limited		 Very limited	
FLOODED	<pre>~wetness (very limited) ~shrink-swell (moderately limited)</pre>	 1.00 0.36	-excess fines (thickest layer) -possible source (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	<pre>~wetness (very limited) ~too clayey (slightly limited)</pre>	1.00	 (very limited) ~cutbanks cave (very limited)	1.00
87B: Dubbs	 Slightly limited ~shrink-swell (slightly limited)	 0.14 	Very limited -excess fines (thickest layer) -excess fines (bottom layer)	1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Slightly limited ~too clayey (slightly limited) ~too acid (slightly limited)	0.29	 Slightly limited ~cutbanks cave (slightly limited) 	0.29

Map symbol and soil name	Source for roadfi	11	 Source for sand 	l	Source for grave	el	 Source for topsoi 	.1	 Shallow excavatio 	ons
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
89: Foley	 Very limited ~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Very limited ~excess fines (thickest layer) ~excess fines (bottom layer)	 1.00 1.00	 Very limited ~excess fines (bottom layer) ~excess fines (thickest layer)	1.00	 Very limited ~wetness (very limited) 	1.00	 Very limited ~wetness (very limited) ~cutbanks cave (slightly limited)	 1.00 0.29
91: Forestdale, OCCASIONALLY FLOODED	 Very limited	 	 Very limited		 Very limited 		 Very limited 		 Very limited 	
F TOODED	-shrink-swell (very limited) -wetness (limited)	1.00 0.96 	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	 -too clayey (very limited) -wetness (limited) -too acid (slightly limited)	1.00 0.96 0.12	(moderately limited)	0.53
93: Collins, OCCASIONALLY	 Not limited	 	 Very limited		 Very limited 		 Slightly limited		 Limited	
FLOODED		 	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	 1.00 1.00	 ~too acid (slightly limited) 	0.30	 ~wetness (limited) ~flooding (moderately limited) ~cutbanks cave (slightly limited)	0.82
95: Farrenburg, RARELY FLOODED	 Slightly limited	 	 Possible source		 Very limited		 Slightly limited		 Very limited	
KAKEHI FHOODED	 -shrink-swell (slightly limited) -wetness (slightly limited) 	0.28	-excess fines (thickest layer) -possible source (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	<pre> ~too clayey (slightly limited) ~wetness (slightly limited) ~too acid (slightly limited)</pre>	0.21	-cutbanks cave (very limited) -wetness (very limited)	1.00

Map symbol and soil name	Source for roadfill		Source for sand		Source for gravel		Source for topsoil		Shallow excavations	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97: Zachary, OCCASIONALLY FLOODED	 Very limited		 Very limited		 Very limited		 Very limited	 	 Very limited	
	<pre> ~wetness (very limited) ~shrink-swell (slightly limited) </pre>	1.00	-excess fines (thickest layer) -excess fines (bottom layer)	1.00	-excess fines (bottom layer) -excess fines (thickest layer)	1.00	~wetness (very limited) 	1.00	-wetness (very limited) -flooding (moderately limited) -cutbanks cave (slightly limited)	1.00 0.60 0.29
99: Tuckerman, OCCASIONALLY FLOODED	 Very limited 		 Very limited 		 Very limited 		 Very limited 		 Very limited 	
	~wetness (very limited)	1.00	 -excess fines (thickest layer) -excess fines (bottom layer)	 1.00 1.00 	 -excess fines (bottom layer) -excess fines (thickest layer) 	 1.00 1.00	<pre> </pre>	 1.00 0.52 0.21	<pre> -wetness (very limited) -flooding (moderately limited) -cutbanks cave (slightly limited)</pre>	1.00 0.60 0.29
M-W: Water	 Not rated 		 Not rated 		 Not rated 		 Not rated 		 Not rated 	
W: Water	 Not rated 		 Not rated 		 Not rated 		 Not rated 		 Not rated 	
								.		